



**Figure S2:** Number of daily data measurements included in calculation of monthly mean  $\Omega\text{NO}_2$  (a), and  $\Omega\text{HCHO}$  (b) for each grid cell over the Eastern US for June, July, August of 2005-2015. Within each subplot, the box and whisker plot on the left corresponds with SPEI normal conditions, while the plot on the right corresponds with SPEI drought conditions, with mean values shown beneath x tick labels. Dashed lines correspond with  $y=10$ , delineating the minimum threshold for months that were included in analyses. Boxes mark 50% confidence intervals (CI). Whiskers mark 95% CI. Orange, solid lines mark median values. Green, dashed lines mark mean values.